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IN THE CLAIMS

1. (Currently Amended) A circuit material for the formation of circuits or multi-layer circuits, the circuit material comprising:

a first conductive layer; and

a dielectric layer disposed on the first conductive layer, wherein the dielectric layer comprises a crosslinkable liquid crystalline polymer comprising phenyl maleimide groups, nadimide groups, phenylacetylene groups, or a combination comprising at least one of the foregoing groups~~.~~; and further comprises a particulate filler, a fibrous web, or a combination comprising at least one of the foregoing.

2. (Original) The circuit material of claim 1, wherein the conductive layer is copper.

3. (Original) The circuit material of claim 1, wherein the dielectric layer is substantially nonflowable when fully crosslinked.

4. (Cancelled)

5. (Currently Amended) The circuit material of claim 1, wherein the dielectric layer is flowable when partially crosslinked.

6. (Original) The circuit material of claim 1, further comprising a second conductive layer disposed on the dielectric layer on a side opposite the first conductive layer.

7. (Cancelled)

8. (Original) The circuit material of claim 1, wherein the crosslinkable liquid crystalline polymer comprises phenyl maleimide groups.

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9. (Original) The circuit material of claim 1, having a dielectric constant of less than about 3.8, a dissipation factor of less than or equal to about 0.007 when measured from 1 to 10 GHz, and a UL-94 rating of V-1 or better, when the liquid crystalline polymer composition is fully crosslinked.

10. (Currently Amended) A circuit laminate for the formation of circuits or multi-layer circuits, the circuit laminate comprising:

a first conductive layer; and

a dielectric substrate disposed on the first conductive layer, wherein the dielectric substrate comprises a B-staged or thermoset liquid crystalline polymer having crosslinked groups derived from phenyl maleimide groups, nadimide groups, phenylacetylene groups, or a combination comprising at least one of the foregoing groups~~,~~; and further comprises a particulate filler, a fibrous web, or a combination comprising at least one of the foregoing.

11. (Original) The circuit laminate of claim 10, wherein the conductive layer is copper.

12. (Cancelled)

13. (Original) The circuit laminate of claim 10, having a dielectric constant of less than about 3.8, a dissipation factor of less than or equal to about 0.007 when measured at 1 to 10 GHz, and a UL-94 rating of V-1 or better when fully crosslinked.

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14. (Currently Amended) A method of forming a circuit material, comprising

contacting a crosslinkable liquid crystalline polymer composition with a conductive layer, wherein the crosslinkable liquid crystalline polymer composition comprises a crosslinkable liquid crystalline polymer comprising phenyl maleimide groups, nadimide groups, phenylacetylene groups, or a combination comprising at least one of the foregoing groups; and further comprises a particulate filler, a fibrous web, or a combination comprising at least one of the foregoing; and

crosslinking the crosslinkable liquid crystalline polymer to form a B-staged or thermoset liquid crystalline polymer dielectric material.

15. (Currently Amended) A circuit comprising:

a dielectric substrate comprising a thermoset liquid crystalline polymer having crosslinked phenyl maleimide groups, nadimide groups, phenylacetylene groups, or a combination comprising at least one of the foregoing groups; and further comprising a particulate filler, a fibrous web, or a combination comprising at least one of the foregoing; and

a first conductive circuit layer disposed on the dielectric substrate.

16. (Original) The circuit of claim 15, wherein the conductive layer is copper.

17. (Cancelled)

18. (Original) The circuit of claim 15, having a dielectric constant of less than about 3.8, a dissipation factor of less than or equal to about 0.007 when measured from 1 to 10 GHz, and a UL-94 rating of V-1 or better.

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19. (Original) A multi-layer circuit comprising:

a resin coated conductive layer comprising a first conductive layer disposed on a flowable dielectric material; and

a diclad circuit, comprising a dielectric substrate disposed between a circuit layer and a second conductive layer, wherein the flowable dielectric material is disposed on a side of the circuit layer opposite the dielectric substrate, and further wherein

the flowable dielectric material, the dielectric substrate, or both, comprises a thermoset liquid crystalline polymer having crosslinked phenyl maleimide groups, nadimide groups, phenylacetylene groups, or a combination comprising at least one of the foregoing groups.

20. (Currently Amended) The multi-layer circuit of claim 19, wherein the first conductive layer, second conductive layer, and circuit layer are copper.

21. (Original) The multi-layer circuit of claim 19, having a dielectric constant of less than about 3.8, a dissipation factor of less than or equal to about 0.007, and a UL-94 rating of V-1 or better.

22. (Original) The multilayer circuit of claim 19, wherein the dielectric substrate further comprises a particulate filler, a fibrous web, or a combination comprising at least one of the foregoing.

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23. (Original) A multi-layer circuit comprising:

a first diclad circuit comprising a first dielectric substrate disposed between a first circuit layer and a second circuit layer;

a second diclad circuit comprising a second dielectric substrate disposed between a third circuit layer and a fourth circuit layer; and

a bond ply disposed between the second circuit layer on a side opposite the first dielectric substrate layer, and the third circuit layer on a side opposite the second dielectric layer, wherein at least one of the first dielectric substrate, the second dielectric substrate, or the bond ply comprises a B-staged or thermoset liquid crystalline polymer having crosslinked phenyl maleimide groups, nadimide groups, phenylacetylene groups, or a combination comprising at least one of the foregoing groups.

24. (Original) The multilayer circuit of claim 23, having a dielectric constant of less than about 3.8, a dissipation factor of less than or equal to about 0.007, and a UL-94 rating of V-1 or better.

25. (Original) The multilayer circuit of claim 23, wherein at least one of the first dielectric substrate, the second dielectric substrate, or the bond ply further comprises a particulate filler, a fibrous web, or a combination comprising at least one of the foregoing.

26. (Original) The multilayer circuit of claim 23, further comprising a cover film disposed on the first circuit layer on a side opposite the first dielectric layer, wherein the cover film comprises a thermoset liquid crystalline polymer formed by the crosslinking of phenyl maleimide groups, nadimide groups, phenylacetylene groups, or a combination comprising at least one of the foregoing groups.

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27. (Currently Amended) A B-staged circuit material for the formation of circuits or multi-layer circuits, the circuit material comprising:

a first conductive layer; and

a dielectric layer disposed on the first conductive layer, wherein the dielectric layer comprises a liquid crystalline polymer comprising phenyl maleimide groups, nadimide groups, phenylacetylene groups, or a combination comprising at least one of the foregoing groups, wherein the groups have been partially crosslinked~~.~~; and further comprises a particulate filler, a fibrous web, or a combination comprising at least one of the foregoing.

28. (Original) The B-staged circuit material of claim 27, wherein the conductive layer is copper.

29. (Original) A circuit material for the formation of circuits or multi-layer circuits, the circuit material comprising:

a first conductive layer; and

a dielectric layer disposed on the first conductive layer, wherein the dielectric layer comprises a liquid crystalline polymer comprising phenyl maleimide groups, nadimide groups, phenylacetylene groups, or a combination comprising at least one of the foregoing groups, and further wherein said groups crosslink at a temperature is at least about 20°C greater than the melt temperature of the liquid crystalline polymer.

30. (New) The circuit material of claim 29, wherein the conductive layer is copper.

31. (New) The circuit material of claim 29, wherein the dielectric layer is substantially nonflowable when fully crosslinked.

32. (New) The circuit material of claim 29, wherein the dielectric layer is flowable when partially crosslinked.

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33. (New) The circuit material of claim 29, further comprising a second conductive layer disposed on the dielectric layer on a side opposite the first conductive layer.

34. (New) The circuit material of claim 29, wherein the dielectric layer further comprises a particulate filler, a fibrous web, or a combination comprising at least one of the foregoing.

35. (New) The circuit material of claim 29, wherein the crosslinkable liquid crystalline polymer comprises phenyl maleimide groups.

36. (New) The circuit material of claim 29, having a dielectric constant of less than about 3.8, a dissipation factor of less than or equal to about 0.007 when measured from 1 to 10 GHz, and a UL-94 rating of V-1 or better, when the liquid crystalline polymer composition is fully crosslinked.

37. (New) The circuit laminate of claim 10, further comprising a second conductive layer disposed on the dielectric substrate on a side opposite the first conductive layer.

38. (New) The circuit laminate of claim 10, wherein the B-staged or thermoset liquid crystalline polymer having crosslinked groups derived from phenyl maleimide groups.

39. (New) The method of claim 14, wherein the conductive layer is copper.

40. (New) The method of claim 14, wherein the crosslinkable liquid crystalline polymer is substantially nonflowable when fully crosslinked.

41. (New) The method of claim 14, wherein the crosslinkable liquid crystalline

polymer is flowable when partially crosslinked.

42. (New) The method of claim 14, further comprising contacting the crosslinkable liquid crystalline polymer composition with a second conductive layer on a side opposite the first conductive layer and crosslinking the crosslinkable liquid crystalline polymer to form a B-staged or thermoset liquid crystalline polymer dielectric material.

43. (New) The method of claim 14, wherein the crosslinkable liquid crystalline polymer comprising phenyl maleimide groups.

44. (New) The method of claim 14, wherein the circuit material formed having a dielectric constant of less than about 3.8, a dissipation factor of less than or equal to about 0.007 when measured from 1 to 10 GHz, and a UL-94 rating of V-1 or better, when the liquid crystalline polymer composition is fully crosslinked.

45. (New) The circuit of claim 15, further comprising a second conductive layer disposed on the dielectric substrate on a side opposite the first conductive layer.

46. (New) The circuit of claim 15, wherein the thermoset liquid crystalline polymer having crosslinked phenyl maleimide groups.

47. (New) The multi-layer circuit of claim 19, wherein the thermoset liquid crystalline polymer having crosslinked phenyl maleimide groups.

48. (New) The multi-layer circuit of claim 23, wherein the first circuit layer, the second circuit layer, the third circuit layer, and the fourth circuit layer are copper.

49. (New) The multi-layer circuit of claim 23, wherein the B-staged or thermoset liquid crystalline polymer having crosslinked phenyl maleimide groups.

50. (New) The B-staged circuit material of claim 27, wherein the dielectric layer is substantially nonflowable when fully crosslinked.

51. (New) The B-staged circuit material of claim 27, wherein the dielectric layer is flowable when partially crosslinked.

52. (New) The B-staged circuit material of claim 27, further comprising a second conductive layer disposed on the dielectric layer on a side opposite the first conductive layer.

53. (New) The B-staged circuit material of claim 27, wherein the liquid crystalline polymer comprising phenyl maleimide groups.

54. (New) The B-staged circuit material of claim 27, having a dielectric constant of less than about 3.8, a dissipation factor of less than or equal to about 0.007 when measured from 1 to 10 GHz, and a UL-94 rating of V-1 or better, when the liquid crystalline polymer composition is fully crosslinked.

55. (New) A circuit material comprising:

a first conductive layer; and

a dielectric layer disposed on the first conductive layer, wherein the dielectric layer comprises a crosslinkable liquid crystalline polymer comprising phenyl maleimide groups, nadimide groups, phenylacetylene groups, or a combination comprising at least one of the foregoing groups, wherein the circuit material has a dielectric constant of less than about 3.8, a dissipation factor of less than or equal to about 0.007 when measured from 1 to 10 GHz, and a UL-94 rating of V-1 or better, when the liquid crystalline polymer composition is fully crosslinked.

56. (New) The circuit material of claim 55, wherein the conductive layer is copper.

57. (New) The circuit material of claim 55, wherein the dielectric layer is substantially nonflowable when fully crosslinked.

58. (New) The circuit material of claim 55, wherein the dielectric layer is flowable when partially crosslinked.

59. (New) The circuit material of claim 55, further comprising a second conductive layer disposed on the dielectric layer on a side opposite the first conductive layer.

60. (New) The circuit material of claim 55, wherein the crosslinkable liquid crystalline polymer comprising phenyl maleimide groups.

61. (New) A circuit laminate comprising:

a first conductive layer; and

a dielectric substrate disposed on the first conductive layer, wherein the dielectric substrate comprises a B-staged or thermoset liquid crystalline polymer having crosslinked groups derived from phenyl maleimide groups, nadimide groups, phenylacetylene groups, or a combination comprising at least one of the foregoing groups, wherein the circuit laminate has a dielectric constant of less than about 3.8, a dissipation factor of less than or equal to about 0.007 when measured at 1 to 10 GHz, and a UL-94 rating of V-1 or better when fully crosslinked.

62. (New) The circuit laminate of claim 61, wherein the conductive layer is copper.

63. (New) The circuit laminate of claim 61, further comprising a second conductive layer disposed on the dielectric substrate on a side opposite the first conductive layer.

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64. (New) The circuit laminate of claim 61, wherein the thermoset liquid crystalline polymer having crosslinked groups derived from phenyl maleimide groups.

65. (New) A circuit comprising:

a dielectric substrate comprising a thermoset liquid crystalline polymer having crosslinked phenyl maleimide groups, nadimide groups, phenylacetylene groups, or a combination comprising at least one of the foregoing groups; and

a first conductive circuit layer disposed on the dielectric substrate;

wherein the circuit has a dielectric constant of less than about 3.8, a dissipation factor of less than or equal to about 0.007 when measured from 1 to 10 GHz, and a UL-94 rating of V-1 or better.

66. (New) The circuit of claim 65, wherein the conductive layer is copper.

67. (New) The circuit of claim 65, further comprising a second conductive circuit layer disposed on the dielectric substrate on a side opposite the first conductive circuit layer.

68. (New) The circuit of claim 65, wherein the thermoset liquid crystalline polymer having crosslinked phenyl maleimide groups.